

FIG. 1A

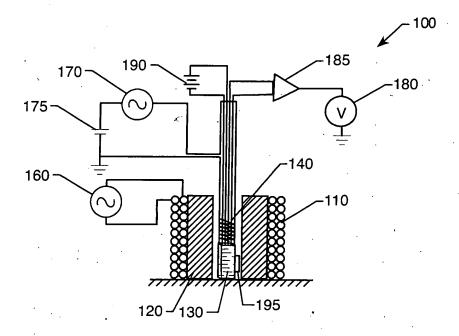


FIG. 1B

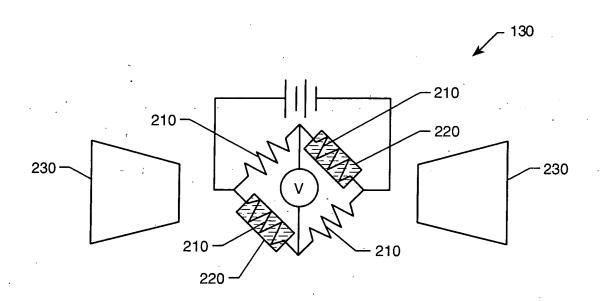


FIG. 2

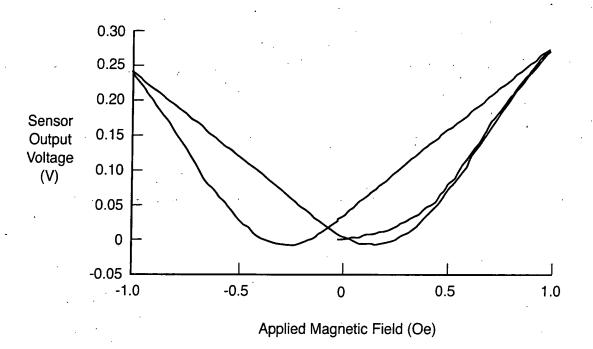


FIG. 3

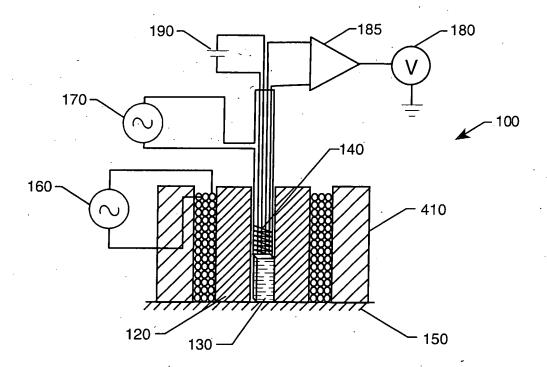
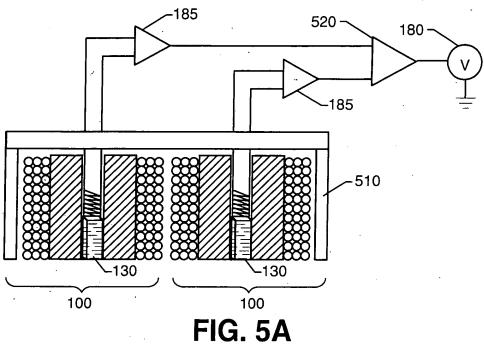


FIG. 4



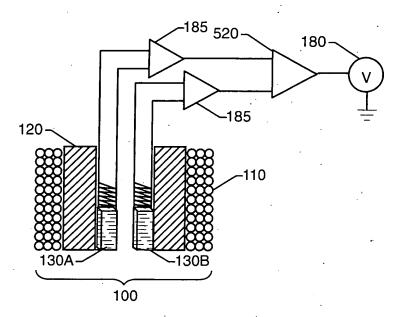


FIG. 5B



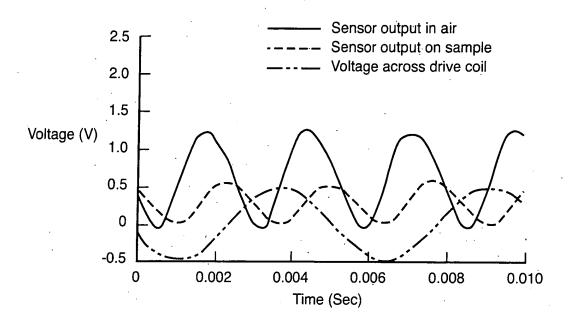


FIG. 6A

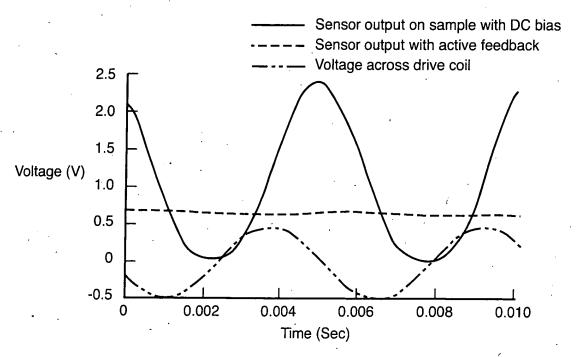
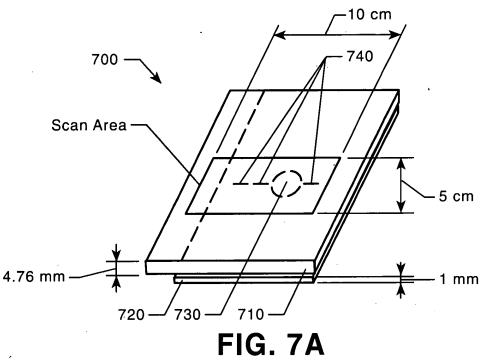


FIG. 6B

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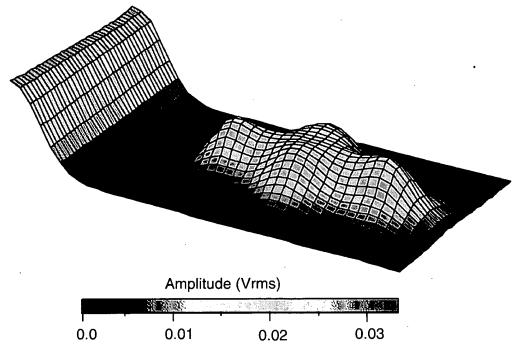
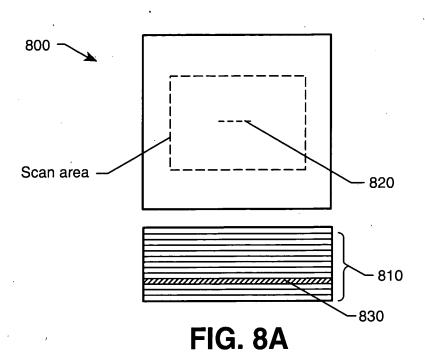
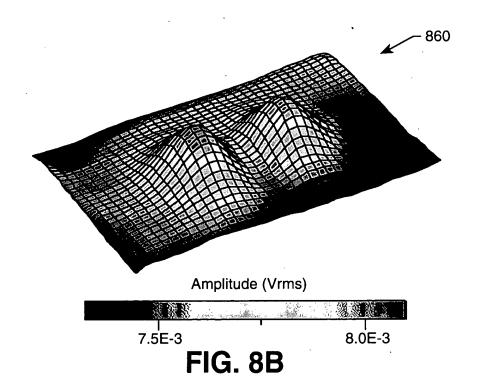


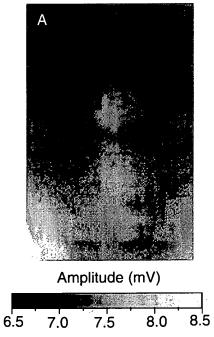
FIG. 7B

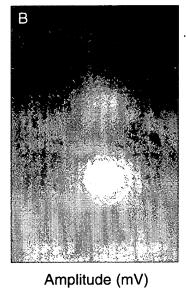
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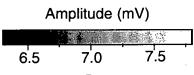
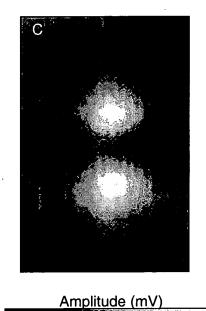
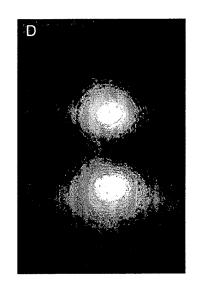
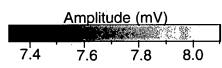


FIG. 9A FIG. 9B









7.8

7.6

8.0

7.4

FIG. 9D

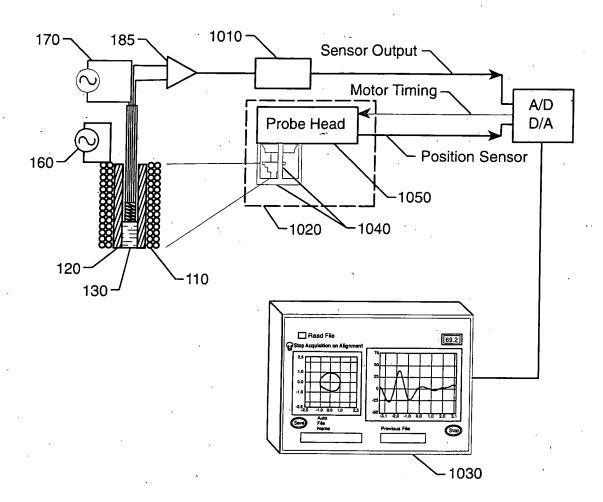
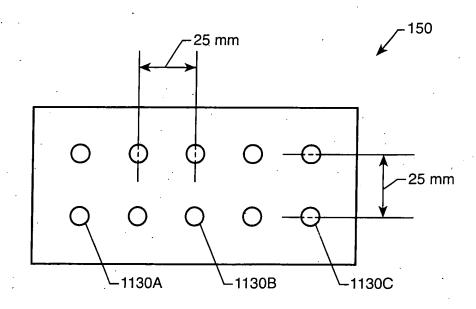


FIG. 10



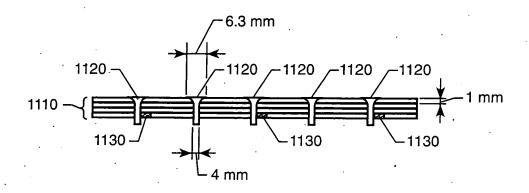
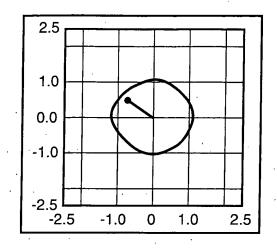


FIG. 11

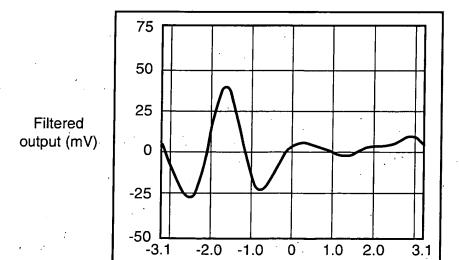
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Amplified output (V)



Angular Position (radians)

FIG. 12A

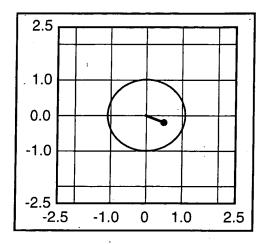


Angular Position (radians)

FIG. 12B

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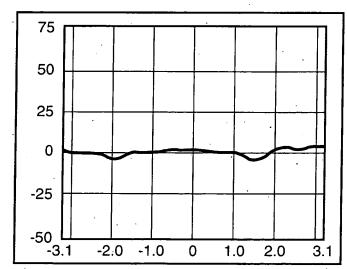
Amplified output (V)



Angular Position (radians)

FIG. 13A





Angular Position (radians)

FIG. 13B

→ 3 Layer GMR→ ▲ 4 Layer GMR

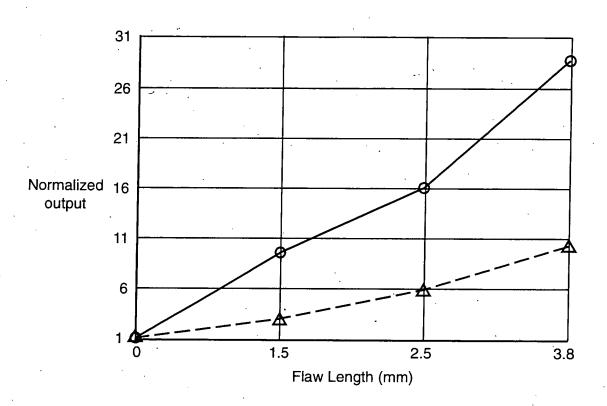


FIG. 14

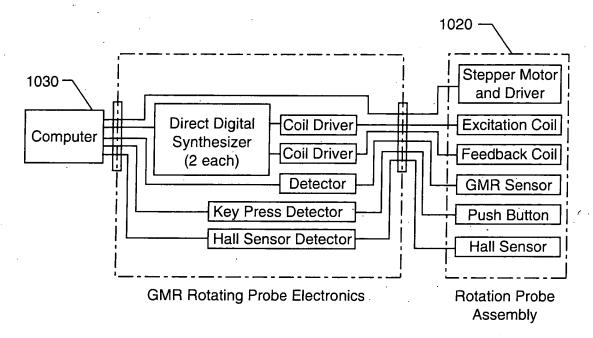


FIG. 15

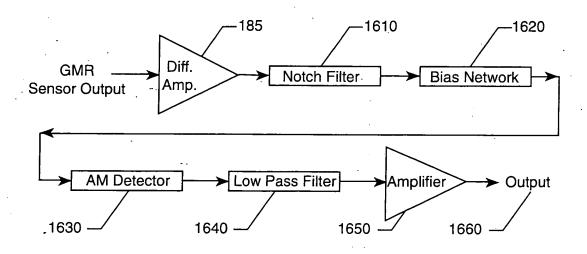


FIG. 16

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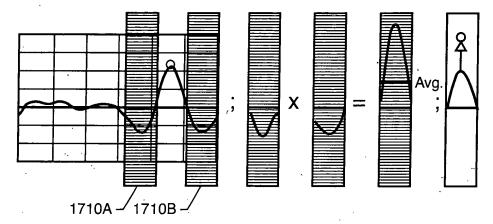


FIG. 17

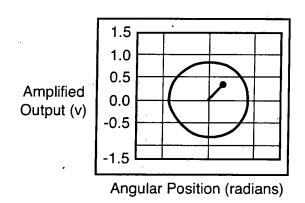
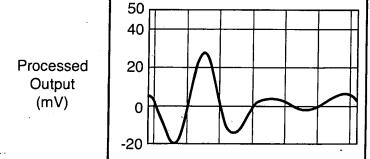


FIG. 18A



Angular Position (radians)

FIG. 18B

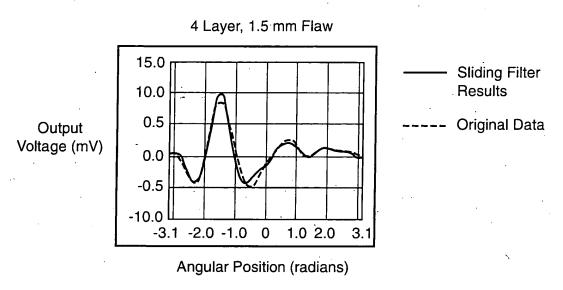


FIG. 19A

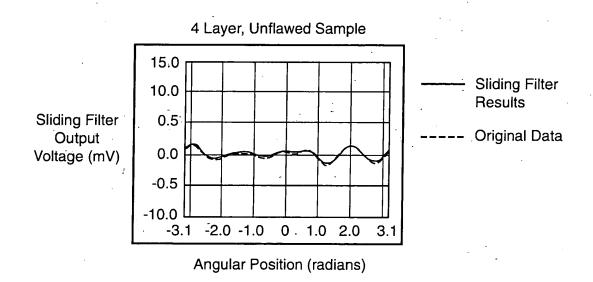


FIG. 19B



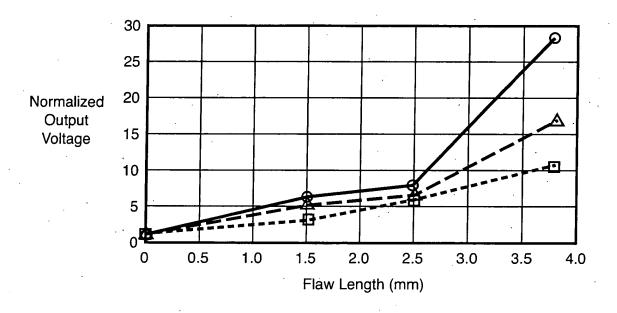


FIG. 20